California Regional Water Quality Control Board Santa Ana Region December 20, 2004

ITEM: 21

SUBJECT: Additions to the List of Supplemental Environmental Projects

DISCUSSION:

The Regional Board may allow a discharger to satisfy some or all of the monetary assessment imposed in an administrative civil liability complaint (ACL complaint) or a mandatory penalty complaint (MPC) by funding or completing one or more supplemental environmental projects (SEPs). As discussed in the Water Quality Enforcement Policy, adopted by the State Water Resources Control Board on February 19, 2002, SEPs are projects that enhance the beneficial uses of the waters of the State, provide a benefit to the public at large, and that, at the time they are included in an ACL/MPC action, are not otherwise required of the discharger.

Any public or private entity may submit a proposal to the State Board or to a regional board for a SEP. The Enforcement Policy also requires that each regional board evaluate each proposal and maintain a list of candidate SEPs that satisfy the general criteria identified in the Enforcement Policy. The regional boards are also required to maintain this list of candidate SEPs on the Internet, along with information on completed SEPs and SEPs that are in progress. The Enforcement Policy includes a discussion of general SEP qualification criteria. These include:

- 1. A SEP should only consist of measures that go above and beyond the obligation of the discharger.
- 2. A SEP should directly benefit or study groundwater or surface water quality or quantity, and the beneficial uses of waters of the State.
- 3. A SEP shall not directly benefit the State Board or a regional board.
- 4. A SEP shall not be an action, process or product that is otherwise required of the discharger by any rule or regulation of any entity.
- The regional board shall also consider the institutional stability, capacity and ability of the discharger or third party to accomplish the work and provide the products and reports expected.

At the May 31, 2002 Board meeting, a list of the SEPs proposed by public and private entities was presented to the Board and it was updated on October 25, 2002. These SEP projects are listed on the website at: http://www.waterboards.ca.gov/santaana/pdf/seplist.pdf

Staff proposes to add the following projects to this list:

 Investigation of Contaminants in the Food Web of the Light-footed Clapper Rail in Upper Newport Bay (UNB) (\$33,000) - Southern California Coastal Water Research Project (SCCWRP) Expected Date of Completion: March 31, 2005 Final Product: Final report and ACCESS database of raw data

Elevated concentrations of selenium (Se) and DDT are sources of water quality impairment in Newport Bay, which prompted the development of total maximum daily loads (TMDLs) for those constituents. The light-footed clapper rail, a federally-listed endangered species, has been identified as one species in Upper Newport Bay that is at risk for immune system or reproductive impairment from Se and DDT. The magnitude of risk from dietary uptake of the bioaccumulative compounds is unknown. The objective of the SCCWRP study is to determine the concentration of Se and DDT in three components of the UNB ecosystem: non-viable clapper rail eggs (or a surrogate species), benthic macrofauna (worms, mollusks, snails, etc.), and the upper 2 cm of the sediment containing the detritus and nutrients that benthic organisms feed on. The latter two components represent key parts of the food web for other Newport birds and fish.

2. Forecasting Coastal Water Quality with Real-Time Sensor Webs (\$70,000) – University of California at Irvine, Dr. Stanley Grant Expected Date of Completion: December 31, 2005 Final Product: The final product will be a predictive model that will be posted on the Web.

The project proposes to link real-time ocean water monitoring data to existing water quality monitoring programs to create a real-time water quality forecasting algorithm to predict beach water quality. This tool will be eventually used to inform/warn the public of the beach water quality conditions.

3. Southern California Coastal Ocean Observing System (SCCOOS), Additional High Frequency Radar Stations (\$125,000) – University of Southern California, Dr. Burton Jones Expected Date of Completion: December 2005 Final Product: Additional high frequency radar stations. A report will be prepared indicating the locations of these radar stations.

Approximately \$23 million of Proposition 40 money has been spent to install high frequency radar stations along Southern California

coastal areas to monitor ocean current. Additional stations are needed to provide complete coverage for the Southern California coastal areas. Approximately \$250,000 is needed to install two additional radar stations to provide better coverage and resolution of the Southern California coast; half of this amount is requested from the Santa Ana Region and the other half from the Los Angeles Regional Board. Information gathered from this ocean observing system can be used to monitor ocean outfalls, urban runoff, and other plumes.

 Southern California Coastal Ocean Observing System (SCCOOS), Autonomous Vehicle for Monitoring Coastal Waters (\$125,000 each) – University of Southern California, Dr. Burton Jones Expected date of completion: December 31, 2005 Final Product: Autonomous vehicle for ocean water monitoring

These vehicles are telemetering vehicles that can maintain a time series of spatial mapping in a coastal region. They are advantageous for mapping surface plumes such as runoff plumes because they are small (~2 meters length) and can sample right to the surface without perturbing the surface plume the way that a boat can do. They can profile to depths of ~200 meters, so they are capable of mapping 3-dimensional features. The data gathered should be useful in predicting the impact of urban runoff and other discharge plumes on coastal water quality.

 East Garden Grove-Wintersburg Channel Urban Runoff Diversion to Natural Treatment Systems in Huntington Beach Central Park (\$500,000) - City of Huntington Beach Expected Date of Completion: July 2008 Final Product: Diversion and natural treatment of polluted urban runoff

The project will divert approximately 3 million gallons per day of urban runoff from a large regional channel, the East Garden Grove-Wintersburg Channel, into the Huntington Beach Central Park for natural treatment and restoration of aquatic resources. The project would provide multiple benefits, including: the reduction in polluted runoff entering Bolsa Chica Wetlands, Huntington Harbour and Anaheim Bay; the restoration of aquatic resources in Central Park, including Talbert Lake, Huntington Lake, and Shipley Nature Center; enhancements to groundwater protection by reinforcing the sea-water intrusion barrier; and educational opportunities.

 Huntington Harbour Water Quality Improvements (\$500,000) – City of Huntington Beach Expected Date of Completion: July 2008 Final Product: A report (the report will include a list of projects completed under the SEP).

This project includes a number of improvement projects and activities as recommended by the Huntington Harbour Waterways Committee's Solutions & Recommendation Matrix. Some activities and projects identified in the matrix include: conducting an eelgrass study; targeted education and outreach to boaters, residents, and local businesses; supporting a "Harbor Watch Program"; and developing a boater live-aboard policy.

The above listed items and any other items meeting the SEP qualification criteria described above will be added to the existing list and posted on the Regional Board's web site.